

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. **(Previously Presented)** A glass having a SOC of about 1–2, a CR of about 3 or less and a SR of about 5 or less, comprising in mole percent based on oxide:

SiO <sub>2</sub>	55–≤70
PbO	30-38
Na <sub>2</sub> O	>0-4.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

2. **(Previously Presented)** A glass according to claim 1, comprising in mole percent based on oxide:

Al <sub>2</sub> O <sub>3</sub>	0.1 – 5.0
ZrO <sub>2</sub>	0.1 -5.0
Sum Al <sub>2</sub> O <sub>3</sub> + ZrO <sub>2</sub>	>0-8

3. **(Original)** A glass according to claim 1 further comprising in mole percent based on oxide:

ZnO	0-5.0
As <sub>2</sub> O <sub>3</sub>	>0-0.4

4. **(Previously Presented)** A glass having a SOC of less than about 1, a CR of about 4 or less, and a SR of about 5 or less, and comprising in mole percent based on oxide:

SiO <sub>2</sub>	49-60
PbO	33-45
Na <sub>2</sub> O	>0-3.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

**5. (Previously Presented)** A glass according to claim 4, comprising in mole percent based on oxide:

Al <sub>2</sub> O <sub>3</sub>	0.1-5.0
ZrO <sub>2</sub>	0.1-5.0
Sum Al <sub>2</sub> O <sub>3</sub> + ZrO <sub>2</sub>	>0-8

**6. (Original)** A glass according to claim 4 further comprising in mole percent based on oxide:

ZnO	0-5.0
As <sub>2</sub> O <sub>3</sub>	>0-0.4

**7. (Previously Presented)** A glass having a SOC of about 1-2, a CR of about 3 or less, and a SR of about 5 or less, and made by adding together and melting, in mole percent:

SiO <sub>2</sub>	55-≤70
PbO	30-38
Na <sub>2</sub> O	>0-4.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,  
 >0 - 5% ZrO<sub>2</sub>, and  
 essentially free of TiO<sub>2</sub>.

**8. (Previously Presented)** A glass having a SOC of less than about 1, a CR of about 4 or less, and a SR of about 5 or less, and made by adding together and melting, in mole percent:

SiO <sub>2</sub>	49-60
PbO	33-45
Na <sub>2</sub> O	>0-3.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,  
 >0 - 5% ZrO<sub>2</sub>, and  
 essentially free of TiO<sub>2</sub>.

**9. (Previously Presented)** A glass having a SOC of less than 2, a CR of 3 or less, and a SR of 5 or less, and comprising in mole percent based on oxide:

SiO <sub>2</sub>	49-≤70
PbO	30-45
Na <sub>2</sub> O	0-5
K <sub>2</sub> O	0-3
Sum Na <sub>2</sub> O + K <sub>2</sub> O	>0-5
Sum B <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub> O <sub>3</sub> + La <sub>2</sub> O <sub>3</sub> + ZnO + MoO <sub>3</sub> + TaO <sub>5</sub> + ZrO <sub>2</sub> + WO <sub>3</sub> + In <sub>2</sub> O <sub>3</sub>	0-10

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,  
 >0 - 5% ZrO<sub>2</sub>, and  
 essentially free of TiO<sub>2</sub>.

**10. (Previously Presented)** A glass having a SOC of 1-2, a CR of 3 or less, and a SR of 5 or less, and comprising in mole percent based on oxide:

SiO <sub>2</sub>	49-≤70
PbO	30-45
Na <sub>2</sub> O	0-5
K <sub>2</sub> O	0-3
Sum Na <sub>2</sub> O + K <sub>2</sub> O	>0-5
Sum ZrO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	>0-8

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

**11. (Canceled)**

**12. (Previously Presented)** A glass having a SOC of 1-2, a CR of 3 or less, and a SR of 5 or less, and made by adding together and melting, in mole percent:

SiO <sub>2</sub>	49-≤70
PbO	30-45
Na <sub>2</sub> O	0-5
K <sub>2</sub> O	0-3
Sum Na <sub>2</sub> O + K <sub>2</sub> O	>0-5
Sum B <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub> O <sub>3</sub> + La <sub>2</sub> O <sub>3</sub> + ZnO + MoO <sub>3</sub> + TaO <sub>5</sub> + ZrO <sub>2</sub> + WO <sub>3</sub> + In <sub>2</sub> O <sub>3</sub>	0-5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

**13-18. (Canceled)**

**19. (Original)** A glass according to claim 2 further comprising in mole percent based on oxide:

ZnO	0-5.0
As <sub>2</sub> O <sub>3</sub>	>0-0.4

**20. (Previously Presented)** A glass according to claim 1, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**21. (Previously Presented)** A glass according to claim 4, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**22. (Previously Presented)** A glass according to claim 7, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**23. (Previously Presented)** A glass according to claim 8, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**24. (Previously Presented)** A glass according to claim 9, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**25. (Previously Presented)** A glass according to claim 10, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

**26. (Previously Presented)** A glass according to claim 12, wherein the glass comprises in mole percent based on oxide 0.1 - 5% Al<sub>2</sub>O<sub>3</sub> or ZrO<sub>2</sub>.

Please add the following new claims:

**-27. (New)** An optical glass, comprising in mole percent based on oxide:

SiO <sub>2</sub>	55-≤70
PbO	30-38
Na <sub>2</sub> O	>0-4.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

**28. (New)** An optical glass, comprising in mole percent based on oxide:

SiO <sub>2</sub>	49-60
PbO	33-45
Na <sub>2</sub> O	>0-3.5
K <sub>2</sub> O	0-2.5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

**29. (New)** An optical glass made by adding together and melting, in mole percent:

SiO <sub>2</sub>	55-≤70
PbO	30-38
Na <sub>2</sub> O	>0-4.5
K <sub>2</sub> O	0-2.5

>0 - 5%  $\text{Al}_2\text{O}_3$ ,  
 >0 - 5%  $\text{ZrO}_2$ , and  
 essentially free of  $\text{TiO}_2$ .

**30. (New)** An optical glass made by adding together and melting, in mole percent:

$\text{SiO}_2$	49-60
$\text{PbO}$	33-45
$\text{Na}_2\text{O}$	>0-3.5
$\text{K}_2\text{O}$	0-2.5

>0 - 5%  $\text{Al}_2\text{O}_3$ ,  
 >0 - 5%  $\text{ZrO}_2$ , and  
 essentially free of  $\text{TiO}_2$ .

**31. (New)** An optical glass, comprising in mole percent based on oxide:

$\text{SiO}_2$	49-≤70
$\text{PbO}$	30-45
$\text{Na}_2\text{O}$	0-5
$\text{K}_2\text{O}$	0-3
Sum $\text{Na}_2\text{O} + \text{K}_2\text{O}$	>0-5
Sum $\text{B}_2\text{O}_3 + \text{Al}_2\text{O}_3 + \text{Y}_2\text{O}_3 + \text{La}_2\text{O}_3 + \text{ZnO} + \text{MoO}_3 + \text{TaO}_5 + \text{ZrO}_2 + \text{WO}_3 + \text{In}_2\text{O}_3$	0-10

>0 - 5%  $\text{Al}_2\text{O}_3$ ,  
 >0 - 5%  $\text{ZrO}_2$ , and  
 essentially free of  $\text{TiO}_2$ .

32. (New) An optical glass, comprising in mole percent based on oxide:

SiO <sub>2</sub>	49-≤70
PbO	30-45
Na <sub>2</sub> O	0-5
K <sub>2</sub> O	0-3
Sum Na <sub>2</sub> O + K <sub>2</sub> O	>0-5
Sum ZrO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	>0-8

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>.

33. (New) An optical glass made by adding together and melting, in mole percent:

SiO <sub>2</sub>	49-≤70
PbO	30-45
Na <sub>2</sub> O	0-5
K <sub>2</sub> O	0-3
Sum Na <sub>2</sub> O + K <sub>2</sub> O	>0-5
Sum B <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub> O <sub>3</sub> + La <sub>2</sub> O <sub>3</sub> + ZnO + MoO <sub>3</sub> + TaO <sub>5</sub> + ZrO <sub>2</sub> + WO <sub>3</sub> + In <sub>2</sub> O <sub>3</sub>	0-5

>0 - 5% Al<sub>2</sub>O<sub>3</sub>,

>0 - 5% ZrO<sub>2</sub>, and

essentially free of TiO<sub>2</sub>--